(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **13.08.2003 Bulletin 2003/33**

(51) Int CI.7: **A61 M 5/32**

(43) Date of publication A2:02.07.2003 Bulletin 2003/27

(21) Application number: 03005683.2

(22) Date of filing: 10.08.2000

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU

MC NL PT SE

(30) Priority: **15.10.1999 US 419184**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:00117127.1 / 1 092 443

(71) Applicant: Becton, Dickinson and Company Franklin Lakes, New Jersey 07465 (US)

(72) Inventor: Caizza, Richard J. Barry Lakes 07422, New Jersey (US)

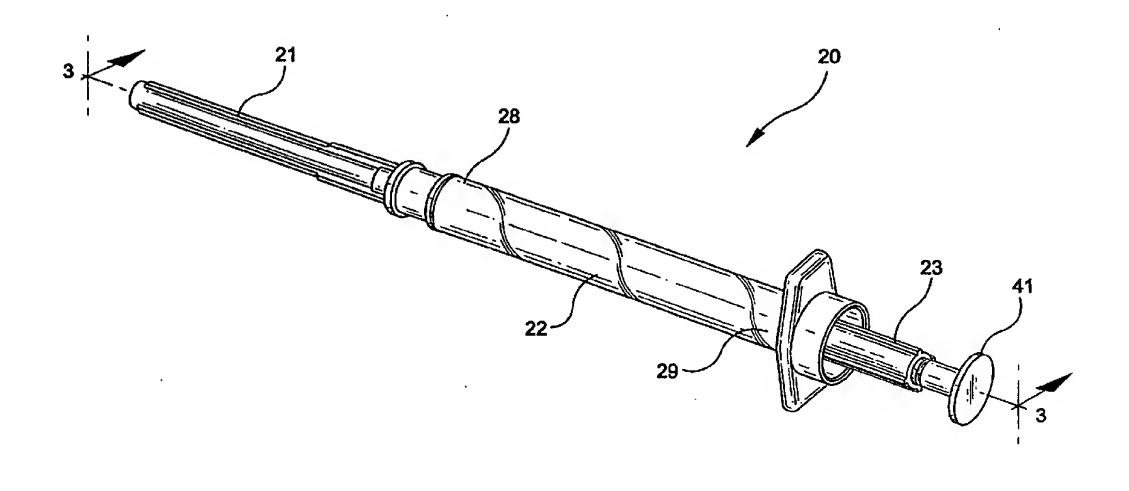
(74) Representative: Ruffles, Graham Keith MARKS & CLERK,
57-60 Lincoln's Inn Fields
London WC2A 3LS (GB)

(54) Retracting needle syringe

(57) A retracting needle assembly for use with a syringe barrel having a cylindrical collar and a plunger having a release element with a sharp distal end includes an outer hub having a passageway therethrough and an inner hub having a proximal end, a distal end and a conduit therethrough. The proximal end of the inner hub has an inner portion and a dissociable outer portion connected to the inner portion. The dissociable outer portion is further connected to the outer hub. The distal end of the

inner hub is smaller than the passageway of the outer hub at the distal end of the outer hub and projects distally outwardly therefrom. A needle cannula having a distal end, a proximal end, and a lumen therethrough is connected to the inner hub so that the lumen is in fluid communication with the conduit. An energized spring is contained between the inner and outer hub. Structure is provided for connecting the outer hub to the collar of the syringe barrel.

FIG-1





EUROPEAN SEARCH REPORT

Application Number EP 03 00 5683

Category	Citation of document with in of relevant passa	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
Х		TZEN S WILLIAM ET AL) 9-10-05)		A61M5/32
A	10 August 1999 (199	EK GREGORY A ET AL) 9-08-10) - column 6, line 21;	1-12	
A	US 5 180 369 A (DYS 19 January 1993 (19 * column 3, line 6 figures 1-4 *		1-12	
A	US 5 605 544 A (TSA 25 February 1997 (1 * abstract; figures * column 3, line 42	997-02-25)	1,2	
A	EP 0 914 837 A (PRE; VAUGHN CHARLES ART 12 May 1999 (1999-0 * abstract; figures	HUR SR (US)) 5-12)	12	TECHNICAL FIELDS SEARCHED (Int.CI.7) A61M
	The present search report has	been drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	BERLIN	16 June 2003	Jar	meson, P
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category nological background -written disclosure mediate document	E : earlier patent after the filing her D : document cite L : document cite	ciple underlying the document, but publidate ed in the application of for other reasons e same patent famili	ished on, or

2

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 03 00 5683

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-06-2003

US 5961491 A US 5935104 A US 5180369 A US 5605544 A EP 0914837 A	05-10-1999 10-08-1999 19-01-1993	US CA DE FR GB JP US US US US US US US US US	2002524154	A1 A1 A ,B A A A A A A	23-06-199 13-03-199 19-03-199 03-04-199 02-06-199 06-07-199 13-07-199 13-07-199 13-07-199 08-06-199 01-06-199
US 5180369 A US 5605544 A		EP JP	1105174 2002524154	<u>A</u> 1	13-06-200
US 5605544 A	19-01-1993		0013724	•	06-08-200 16-03-200
		NONE			
FP 0914837 A	25-02-1997	NONE			
	12-05-1999	US EP CA EP JP WO US US	5211629 0914837 2126440 0618818 7506011 9312829 6074370 5613952 5800403	A2 A1 A1 T A1 A	18-05-199 12-05-199 08-07-199 12-10-199 06-07-199 08-07-199 13-06-200 25-03-199 01-09-199